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AUTHOR Ellet, Chad D.; Logan, Connie S.
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ABSTRACT

A study involving 55 elementary schools and 18 secondary schools was undertaken to examine the relationships among teachers' perceptions of school organizational coupling structures, school environmental robustness, and three school effectiveness measures (school organizational effectiveness, school achievement, and average daily attendance). The following survey instruments were used: (1) the Organizational Coupling Structure Inventory--Teacher Form, a 98-item questionnaire; (2) the Robustness Semantic Differential, a 10-item polar adjective checklist providing a generalized measure of total school or classroom climate; and (3) the Index of Perceived Organizational Effectiveness, an eight-item, four dimension instrument. Non-subjective indices of school effectiveness included average daily attendance and student achievement data. Data were collected during the spring of 1989, and 1,843 usable surveys were returned from the 73 schools. Results indicate a considerable variation across schools in the degree of coupling, a generally positive perception among teachers regarding school organizational robustness, and a lack of association between "tight coupling" and school effectiveness. The complexities of schools seem to dictate that future studies of organizational features of schools, school environments, and school effectiveness use multivariate data collection and analysis designs. A 21-item list of references, 7 data tables, and an appendix are provided. (TJH)

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Analyses of School Level Learning Environments:

Organizational Coupling, Robustness and Effectiveness

Chad D. Ellett and Connie S. Logan

College of Education

Louisiana State University

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Analyses of School Level Learning Environments:
Organizational Coupling, Robustness and Effectiveness

Introduction

A variety of alternative organizational and environmental perspectives are available and potentially useful in studying the organizational features and learning environments of schools. The model or metaphor of "loose coupling" has gained considerable attention within the study of formal organizations, and during the past 20 years, schools and school systems have commonly been typically depicted as "loosely structured" organizations (Bidwell, 1964; Weick, 1976; Meyer and Rowan, 1978). One of the earliest descriptions of "loose coupling" is provided by Glassman (1973) in which loose coupling is addressed as a model for living systems. The coupling metaphor has been extended to understanding schools as organizations from a variety of perspectives. Definitions of coupling (Weick, 1976; Miskel & McDonald, 1982; Firestone and Wilson, 1985) also vary considerably. However, the coupling construct as it applies to schools typically refers to a pattern of organizational and interpersonal mechanisms that serve to link together management characteristics and selected elements of the school social environment (Logan, 1989).

Within the effective schools literature, attention has been directed to the organizational attributes of schools that have been characterized as effective. Recent research and commentary on the instructionally effective schools indicate that tight linkages enhance effectiveness (Edmonds, 1979). Firestone and Wilson (1985) argue that principals can identify linkages to or among teachers that are tight or can be tightened and can use them to influence the quality

instruction and subsequent achievement. Such linkages can conceivably alter elements of the total school learning environment in ways that facilitate or impede school effectiveness. Most educators are now familiar with the effective schools "formula," as popularized by Ronald Edmonds and other researchers (Stedman, 1987); and many of the calls for school reform cite the findings from recent research on effective teaching and effective schools as examples of how schools and classrooms should change (Glickman, 1987). However, several limitations of the effective schools research have been noted (Cuban, 1983; Hoy and Ferguson, 1985).

The tightly coupled image of instructionally effective schools conflicts with the variable mixture of organizational coupling often found in business organizations (Astuto & Clark, 1985). Some patterns of coupling may enhance organizational effectiveness, whereas, other patterns of coupling may diminish the capacity of organizations to be effective. Considering the complexity of this relationship, Astuto & Clark (1985) argue that the key to organizational effectiveness is not the arbitrary tightening or loosening of coupling, but the sensitivity to coupling as an organizational variable and the identification of patterns of coupling that enhance or impede organizational effectiveness. Recently, Orton and Weick (1988) have argued for a "paradoxical" view of coupling in schools. This view suggests that coupling in schools and other organizations can occur in a variety of combinations and in patterns of simultaneous coupling and uncoupling of elements.

A recent study by Logan (1989) provides some support for Orton and Weick's (1988) view of coupling as it is applied to understanding variation in combinations of coupling structures in demonstrably effective and ineffective schools. Logan's (1989) findings suggest that "effective" schools can be characterized by a variety of coupling patterns and, that the "tight ship" metaphor

for describing effective schools may not be appropriate at all. The particular combination of coupling features associated with effective schools may be unique and may interact as well with a variety of other school environment variables. Elements of the school climate and the generalized quality of the learning environment may be important among these other variables.

Much has been learned during the past two decades about learning environments within schools (Fraser, 1986). However, most learning environment research has been focused on the classroom level. This paper reports the results of analyses of comprehensive data using the total school as the unit of analysis to examine relationships among school coupling structures, school environmental robustness and perceived and actual school effectiveness.

Purpose

The purpose of this paper is to examine relationships between teachers' perceptions of school organizational coupling structures, school environmental robustness and three school effectiveness measures: 1) school organizational effectiveness; 2) school achievement; and 3) school attendance.

Methodology and Procedures

Sample: The sample for the study consisted of 73 schools (55 elementary and 18 secondary). All teachers within each of the schools were asked to participate.

Instrumentation: Three instruments were used for data collection. Each of these is described in the sections that follow.

Organizational Coupling Structure Inventory-Teacher Form. School coupling structure was measured by the Organizational Coupling Structure Inventory-Teacher Form (OCSI-T) (Logan & Ellett, 1989). The OCSI-T has undergone considerable development to establish both construct validity and internal consistency reliability. The form used in this study was derived from a previous factor analysis of 171 items using a sample of some 700 teachers. Development and refinement of the OCSI-T has been described in detail in Logan & Ellett (1989).

The form of the OCSI-T used in this study originally consisted of 98 items reflecting six subscales. Subsequent factor analytic work served to reduce and refine the OCSI-T to five subscales consisting of 67 items (Logan, 1989). These refined subscales with the number of items comprising each shown in parentheses are as follows: 1) Goal Consensus/Vision (GC/V) (26); 2) Manipulative Control (MC) (12); 3) Work Scrutiny (WKS) (11); 4) Autonomy (AUT) (11) and 5) Centralization (CN) (7). All analyses reported in this paper were completed with the 67-item version of the OCSI-T. The internal consistency reliabilities (Cronbach Alpha's) of the OCSI-T subscales are reported as follows: 1) GC/V (.86); 2) MC (.75); 3) WKS (.86); 4) AUT (.77); and 5) CN (.60) (Logan, 1989).

In responding to OCSI-T items, teachers use a four-point, forced choice Likert format ranging from 1= "Strongly Disagree" to 4 "Strongly Agree." The range in maximum scores for the various subscales is 28 (7 X 4) to 104 (26 X 4). High scores on the OCSI-T subscales indicate a greater degree of "tight coupling," whereas low scores indicate a greater degree of coupling "looseness." A List of the OCSI-T subscales with sample items for each subscale is included in APPENDIX A.

Robustness Semantic Differential: The Robustness Semantic Differential (RSD) is a ten-item, polar adjective checklist originally developed by Licata and Willower (1978) that has been described as a generalized measure of the total school or classroom climate. As a theoretical school environment construct, robustness has been defined as a "high dramatic structure produced in a school by tension-creating structures" (Licata & Johnson, 1989). The RSD uses a seven-point semantic differential scale with the following sets of polar adjectives: boring-interesting; fresh-stale; meaningless-meaningful; important-unimportant; unusual-usual; powerful-weak; active-passive; thrilling-quieting; uneventful-action-packed; and challenging-dull. These adjective pairs can be applied to the measurement of perceptions of the "dramatic content" of key school concepts and they have been used successfully with students, teachers and administrators and with various units of analysis. Concurrent validity of the RSD adjective pairs has been demonstrated for the key concepts of "dramatic" and non-dramatic" (Licata & Willower, 1978). Criterion-related validity of the RSD has also been successfully explored (Ellett & Licata, 1982). Research with the RSD continues to demonstrate rather high test-retest and internal consistency reliabilities (Morris, 1986). A comprehensive review and synthesis of research on the robustness construct as measured by the RSD can be found in (Licata & Johnson, 1989).

The RSD yields scores ranging from a low of 10 (low robustness) to a high of 70 (high robustness). In this study, the RSD was applied to four key concept statements: 1)"My Role as a Teacher Is" (MRAT); 2)" My Principal Is" (MPI); 3)"My Students Are" (MSA); and 4) My School Is" (MSI).

Index of Perceived Organizational Effectiveness: The Index of Perceived Organizational Effectiveness (IPOE) (Miskel, Fevurly & Stewart, 1979) was used to measure teachers'

perceptions of the overall effectiveness of the school as an organization. This instrument is a derivative of Mott's (1972) Index of Organizational Effectivenss that was modified by Miskel, et.al for use in schools. The IPOE consists of four dimensions, with two items per dimension: 1) quantity and quality of product; 2) efficiency; 3) adaptability; and 4) flexibility. For each item, respondents select one of five alternatives (scaled from 1-5) to assess how well their school achieves each of the four organizational effectiveness objectives. Scores for each item can range from 1-"low effectiveness" to 5-"high effectiveness." A high score on the IPOE signifies a high degree of perceived organizational effectiveness. The internal consistency reliability for the school version of the IPOE was reported by Miskel, et.al (1979) as .89 and by Hoy and Ferguson (1985) as .87.

School Effectiveness Indices: Two indices of school effectiveness were used in the analyses reported in this paper: 1) Average Daily Attendance (ADA); and 2) Student Achievement. ADA data were available for each of the 73 schools as a yearly average of all twenty-day reporting periods during the 1988-1989 school year. Student achievement data (Composite Normal Curve Equivalent Scores) were available for each school from administration by the district of the Iowa Tests of Basic Skills (elementary schools) and the Tests of Academic Progress (secondary schools).

Data Collection Procedures

Individual instruments were packaged for each teacher and distributed by school. Teachers were given five days to complete the packets and to return them to a central location in the district. Data were collected during the late Spring of 1989. A total of 1843 useable surveys were returned from the 73 schools.

Data Analyses

Summary descriptive statistics were computed for all variables in the study and for pertinent demographic variables. Though not reported here, data collected with the OCSI-T were subjected to a series of confirmatory factor analyses using teachers as the units of analysis to see if the factor structure suggested in previous pilot work (Logan & Ellett, 1989) was maintained with a larger sample of teachers. Both orthogonal and oblique analyses were conducted for the total sample of teachers and for sub-samples of elementary and secondary teachers (Logan, 1989). The results of these analyses produced the 67-item version of the OCSI-T used in the analyses reported in this paper.

Intercorrelations between various coupling dimensions, organizational effectiveness, environmental robustness concepts and school effectiveness indices were computed for the total sample of schools. In addition, a series of stepwise regression analyses with forward inclusion procedures were completed using the school and organizational effectiveness variables as dependent variables and the OCSI-T, RSD and IPOE instruments as independent variables.

Results

In the Logan (1989) study, the OCSI-T was subjected to extensive factor analyses, resulting in five factors being retained: Goal Consensus/Vision, Work Scrutiny, Manipulative Control, Autonomy and Centralization. Alpha reliabilities for the OCSI-T subscales ranged from .60 to .86. The Alpha reliability for the IPOE was .88. Alpha reliabilities for the 4 concepts measured by the RSD ranged from .87 to .92 (Logan, 1989). The reliabilities for these subscales are the same as those reported in the Instrumentation section described above. The results of analyses

reported in this study are based on the Logan (1989) structure of the OCSI-T.

Table 1 presents a summary of descriptive statistics for all measures used in the study. In order to make subscales meaningfully interpretable, subscale means for the OCSI-T, RSD and IPOE were converted to a "percentage of the maximum possible " score." As can be seen in Table 1, the OCSI-T subscale scores ranged from 78.80 % of the maximum possible (Work Scrutiny) to 52.54% of the maximum possible score (Manipulative Control). Scores for the RSD varied from a low percentage of 72.31 ("My Principal Is") to a high of 78.46 ("My Role as a Teacher Is"). Teachers demonstrated the most "perceptual cohesiveness" (smallest standard deviation) for the robustness of their roles as teachers. The largest variation in teachers' perceptions of robustness was for the concept "My Principal Is" (S.D.= 6.35). The range in RSD scores is not considered a large, or meaningfully interpretable range given the range in possible scores for the RSD subscales. The IPOE percentage of the maximum possible score was 75.08%.

Table 2 presents a summary of Pearson product-moment correlations among all variables in the study. Intercorrelations among the OCSI-T variables show relatively moderate relationships among these variables with the exception of GC/V and WKS (r=.60). The strongest relationships among these variables suggest that teachers' perceptions of school Goal Consensus and Vision (GC/V) are positively related to Work Scrutiny (WKS) (r=.60) and negatively related to Manipulative Control (MC) (r=.41) and Centralization (CN) (r=.40). Significant ($p<.05$) positive, but moderate relationships are also evident between Autonomy (AUT) and Manipulative Control (MC) (r=.38) and Work Scrutiny (WKS) (r=.29).

The intercorrelations among the RSD subscales were all positive in direction, statistically significant (p .05) and ranged from rather strong in magnitude (r=.77 for "My School Is" (MSI)

and "My Principal Is" (MPI)), to rather moderate in magnitude (r=.30, for "My Principal Is" (MPI) and "My Students Are" (MSA)). The intercorrelations between subscales of the OCSI-T and the RSD concepts demonstrated a variety of relationships. Goal Consensus/Vision (GC/V was positively and significantly ($p<.05$) related to all four RSD concepts. These correlations ranged from rather moderate (r=.39, GC/V and MSA; r=.43, GC/V and MRAT) to moderately strong (r=.73, GC/V and MPI; r=.76, GC/V and MSI). The OCSI-T subscale of Manipulative Contol (MC) was negatively related to all four RSD concepts, and the two significant relationships ($p<.05$) were between MC and MRAT (r=-.24) and MC and MSI (r=-.32). These correlations were rather moderate in magnitude.

The OCSI-T subscale of Work Scrutiny (WKS) was positively related to all four RSD concepts. These correlations ranged from somewhat moderate (r=.32; WKS and MRAT) to rather strong (r=.68, WKS and MPI; r=.64, WKS and MSI). The OCSI-T Autonomy (AUT) subscale was positively correlated (r=.41) with only the RSD concept of "My Students Are" (MSA). All four RSD concepts were negatively and moderately correlated with the OCSI subscale of Centralization (CN). These correlations ranged from r=-.25 to r=-.33.

The IPOE was rather strongly and positively related to the OCSI-T subscales of Goal Consensus/Vision (GC/V) (r=.84) and Work Scrutiny (WKS) (r=.63). The IPOE was negatively related to the OCSI-T subscales of Manipulative Control (MC) (r=-.41) and Centralization (CN) (r=-.35). The IPOE was moderately strong to strongly related to the four RSD subscales, with values of these correlations ranging from r=.46 (IPOE and MRAT) to r=.81 (IPOE and MSI).

The school composite mean achievement index was positively correlated with the OCSI subscales of GC/V (r=.40) and WKS (r=.34), and negatively correlated with Manipulative Control

(MC) (r=-.40). All four of the RSD concepts were positively correlated with the index of school achievement and these correlations ranged in magnitude from rather moderate (r=.29, MRAT and ACH), to moderately strong (r=.49, MSI and ACH).

School attendance (ADA) was significantly ($p<.05$) and positively correlated with the OCSI-T subscales of GC/V (r=.44), WKS (r=.33) and AUT (r=.39); the RSD concepts of MPI (r=.25), MSA (r=.51) and MSI (r=.36). ADA was also positively and significantly correlated with IPOE (r=.44) and school achievement (ADA; r=.41).

Tables 3 through 7 present a summary of the results of a variety of stepwise multiple regression analyses (forward inclusion of independent variables) regressing the organizational effectiveness measure (IPOE) and the school effectiveness measures (ACH and ADA) on subscales of the OCSI-T and concepts of the RSD. These analyses were completed to examine the ability of selected variables, when considered "in concert," to explain organizational (IPOE) and school effectiveness (ACH and ADA) variance among schools in this sample.

Table 3 shows that the OCSI-T subscale of Goal Consensus/Vision (GC/V) and the RSD concept of "My School Is" accounted for 78% of the IPOE variance. Table 4 shows the results of a similar regression analysis for the index of school achievement. The only variable to enter the regression equation was the RSD variable "My School Is" (MSI). This variable alone acoounted for 24% of the variation in school achievement. Table 5 shows the results of a similar regression for achievement, however, the IPOE has been added to the independent variable set. In this analysis, the IPOE was the most important "predictor" of achievement variance among schools (R=.61; $p<.0001$). The OCSI-T GC/V was the second variable to enter the regression equation and it accounted for an additional 8% of achievement variance among schools. The

final significant variable added to the equation was the RSD concept of "My Principal Is" (MPI). Considered collectively, these three variables accounted for 49% of the achievement variance among schools.

Tables 6 and 7 show the results of similar regression analyses regressing the index of school attendance (ADA) on the OCSI-T subscales and the RSD concepts (Table 6) and completing this same analysis with the IPOE added as an independent variable (Table 7). The results in Table 6 show that the RSD concept of "My Studeants Are" (MSA) was the most important variable in explaining attendance variance, followed by the OCSI-T GC/V variable and the RSD MRAT ("My Role As a Teacher") variable. Together, these three variables accounted for 40% of the attendance variance among these 73 schools.

Table 7 shows results identical to those in Table 6, even though this analysis added the IPOE as an independent variable. When competed against the OCSI-T subscales and the RSD concepts, the IPOE accounted for no significant variance in achievement among the schools in this sample.

Discussion and Implications

The results of the analyses reported in this paper are interesting from a variety of perspectives. The descriptive statistics suggest considerable variation among these schools in the degree of coupling. These schools are characterized by a relatively high level (78.80%) of "tight" coupling on the dimension of Work Scrutiny, somewhat lower levels of tight coupling on Centralization, Goal Consensus/Vision and Autonomy, and the lowest level of coupling on Manipulative Control. These findings suggest that various degrees of "tight" coupling among

schools in a district (when considered collectively) vary considerably depending upon the coupling dimension in question. A similar finding has been established within schools in this sample (Logan, 1989). Thus, it may make no sense to ask whether a school, or in this case, schools in toto, are "tightly" or "loosely" coupled without reference to a particular dimension of coupling. This finding provides some support for Orton & Weick's (1988) view of the "paradoxical" nature of the coupling construct.

The levels of robustness reported for the schools in this sample are very similar to those reported in other large-scale studies of robustness (e.g., Morris, 1986; Morris & Ellett, 1987). They suggest that schools are characterized by generally "robust" learning environments as originally posited by Willower and Licata (1975) and further explicated in major reviews of research on the robustness construct (Licata & Johnson, 1989). The average IPOE index suggests that the schools in this sample, when considered collectively, were viewed by teachers as relatively effective as organizations in accomplishing various goals related to the quantity and quality of school products, and to organizational efficiency, adaptability and flexibility.

The intercorrelations suggest an important set of relationships between coupling structure, school environmental robustness and organizational effectiveness. These schools were characterized by a set of relationships among these variables that suggest that the organizational coupling features of high goal consensus and work scrutiny and low manipulative control, coexist with positive teacher perceptions of the robustness of their roles as teachers, and the robustness of their principals, the students they teach and the schools in which they work. In addition, positive school robustness relative to these concepts, is found in schools in which goal direction and vision and work scrutiny are high, and in which organizational effectiveness is evident.

Thus, robust school environments appear to be environments that are goal directed, that maintain relatively high levels of work scrutiny and low levels of manipulative control, and that are organizationally effective.

The correlations between the school effectiveness indices of achievement and attendance and the OCSI-T suggest that, perhaps, "tightening" the coupling structures of goal direction and work scrutiny and "loosening" the coupling structures of manipulative control can enhance achievement. The study reported here is correlational, of course, and no causal inferences can be made. However, higher achieving schools and those with the highest attendance in this study were generally associated with higher levels of these school coupling features.

Apparently, organizationally effective schools are also typically those with higher achievement and attendance. It may be, as Morris (1986) and Morris & Ellett (1987) suggest, that schools that have supportive learning environments and that are organizationally effective, generate greater "holding power" for students that results in better student attendance and subsequent learning and achievement.

The results of the regression analyses provided several interesting findings. First, an organizationally effective school appears to be one characterized by a very high degree of goal consensus and agreement and communication of the "vision" of what the school ought to be and needs to accomplish. This makes intuitive sense and perhaps, suggests that "tight" coupling relative to establishing and communicating consensus/vision among teachers, administrators and others in the school is an important precursor of creating an organizationally effective work environment. Interestingly, teacher perceptions of the robustness of the school as a whole would predictably add to the enhancement of the effectiveness of the organization more than any other

coupling feature or environmental robustness structure. This robustness feature may also be an important link to school achievement since it was the only variable that explained a significant amount of achievement variance among these schools.

Secondly, from the perspective of using school achievement as an index of school effectiveness, the regression analysis results begin to paint a picture of important linkages between school effectiveness, organizational effectiveness, coupling and the robustness of administrative behavior. When coupling (OCSI-T), robustness (RSD) and organizational effectiveness (IPOE) variables were competed against each other in the same equation, the IPOE explained the largest amount of variance in school achievement, followed by Goal Consensus /Vision and the RSD concept of "My Principal Is." It may be that an "effective" school (from the standardized achievement perspective) is one that must first be organizationally effective and that organizational effectiveness is preceded by "tight" coupling on the Goal Direction/Vision structure. A "robust" principal as school leader, may well create this kind of learning environment and enhance organizational effectiveness and subsequent student learning and achievement. This study did not use "causal modeling" techniques (e.g. LISREL), but the regression results seem to suggest these kinds of findings might ensue from such analyses.

If the "holding power" of a school is an important feature relative to student attendance, one would suspect that schools having high attendance would be relatively "robust." In addition, one would expect that teachers' perceptions of students in these schools would also be that students are themselves "robust." The findings in this study showed that, when school coupling, organizational effectiveness and school robustness variables were competed against each other to explain variance in school attendance, teachers' perceptions of the robustness of students was

the most important variable. This is an interesting finding since it suggests that a robust student population characterizes a school environment in which student attendance is high; and this relationship holds above concerns for general organizational effectiveness of the school, other school robustness structures and organizational coupling features.

When considered collectively, the results of this study suggest that any understanding of the organizational coupling structure of schools needs to be done in view of the definition of effectiveness. Different results attain with the use of different effectiveness variables. In addition, a robust school environment (particularly one containing robust students) may be a more important element related to school "holding power" than any degree of "tight" or "loose" coupling. Results also suggested that a robust school environment is one characterized by relatively high goal consensus, vision and work scrutiny and low manipulative control.

While a high degree of administrative "manipulative control may seem, on the surface, to add to the "dramatic content" of the school environment, it may be that such control is carried out by "low profile," subtle means. The items comprising the Manipulative Control subscale of the OCSI-T primarily focus on the control of resources and the preferential treatment or inequitable use of resources by administrators to coordinate and manage the school. These items appear to be conceptually similar to a political phenomenon recently reported by Blase (1988) as "favoritism." If favoritism represents a subtle means of manipulative control in the school organization, then it may be carried out in hidden ways by low profile, low robust principals.

Studies of effective schools typically use student/school achievement as the operational definition of "effectiveness." Given the multiple purposes of schools, the various characteristics of clientele they serve and a variety of notions about organizational effectiveness (Miskel, et. al.

1979) and "good" schools (Glickman, 1987), future studies of school coupling and school effectiveness might profit from using multiple indices of effectiveness such as those used in this study. The findings suggest that future studies of school coupling and effectiveness might best proceed with a primary focus on the effectiveness of the school as an organization rather than on school achievement and other indices of school productivity.

In summary, it seems that effective schools are not necessarily "tightly coupled" schools. In addition, elements of school effectiveness can importantly, be understood from other, fresh perspectives for studying school environments such as environmental robustness. The complexities of schools seems to dictate that future studies of organizational features of schools, school environments and school effectiveness use of multivariate data collection and analysis designs.

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Table 1
Summary of Descriptive Statistics for OCSI-T and RSD Subscales
and IPOE and School Achievement Scores (n=73 Schools)

OCSI-T	$\bar{X}$	S.D.	$\bar{X}$ % MAX.[a]
A. Goal Consensus/Vision (26)[b]	71.84	3.81	69.08
B. Manipulative Control (12)	25.22	2.07	52.54
C. Work Scrutiny (11)	34.67	2.24	78.80
D. Autonomy (11)	26.75	1.61	60.80
E. Centralization (7)	19.96	0.70	71.29
RSD			
A. "My Role As A Teacher Is" (10)	54.92	2.51	78.46
B. "My Principal Is" (10)	50.62	6.35	72.31
C. "My Students Are" (10)	54.62	3.76	77.89
D. "My School Is" (10)	51.95	4.84	74.21
IPOE (8)	30.03	2.28	75.08
Achievement Composite	56.41[c]	8.88	.....
Attendance[d]	94.92	1.50	.....

[a]Mean score expressed as a percentage of the maximum possible score

[b]Number of items on scale

[c]Normal Curve Equivalent Score (NCE)

[d]Attendance is X ADA for 1988-1989 School Year

Table 2

Summary of Intercorrelations between OCSI-T and RSD Subscales and IPOE and Achievement Scores (n=73 Schools)

	OCSI-T Scales					RSD Scales						
OCSI-T	GC/V	MC	WKS	AUT	CN	MRAT	MPI	MSA	MSI	IPOE	ACH	ADA
A. GC/V	1.00											
B. MC	-.41	1.00										
C. WKS	.60	-.02*	1.00									
D. AUT	.10*	.38	.29	1.00								
E. CN	-.46	.15*	-.19*	.03*	1.00							
RSD												
A. MRAT	.43	-.24	.32	-.08*	-.32	1.00						
B. MPI	.73	-.21*	.68	.10*	-.31	.39	1.00					
C. MSA	.39	-.10*	.43	.41	-.25	.60	.30	1.00				
D. MSI	.76	-.32	.64	.08*	-.33	.61	.77	.60	1.00			
IPOE	.84	-.41	.63	.03*	-.35	.46	.69	.44	.81	1.00		
ACH	.40	-.40	.34	-.14*	-.10*	.28	.24	.37	.49	.62	1.00	
ADA	.44	-.13*	.33	.39	-.19*	.16*	.25	.51	.36	.44	.41	1.00

*p>.05

Table 3

Summary of Stepwise Regression of IPOE on OCSI-T Subscales and RSD Concepts (n=73 Schools)

STEP	VARIABLE	R	R^2	R^2	F	p
1	GC/V	.84	.71	---	176.18	.0001
2	MSI	.88	.78	.07	21.12	.0001

Table 4

Summary of Stepwise Regression of Achievement on OCSI-T Subscales and RSD Concepts (n=73 Schools)

STEP	VARIABLE	R	R^2	R^2	F	p
1	MSI	.49	.24	---	21.62	.0001

Table 5

Summary of Stepwise Regression of Achievement on IPOE, OCSI-T Subscales and RSD Concepts (n=73 Schools)

STEP	VARIABLE	R	R^2	R^2	F	p
1	IPOE	.61	.38	---	41.65	.0001
2	GC/V	.68	.46	.08	9.61	.0028
3	MPI	.70	.49	.03	4.84	.0314

Table 6

Summary of Stepwise Regression of Attendence on OCSI-T Subscales and RSD Concepts

STEP	VARIABLE	R	R^2	R^2	F	p
1	MSA	.51	.26	---	24.59	.0001
2	GC/V	.57	.32	.06	6.92	.0105
3	MRAT	.62	.40	.08	7.41	.0082

Table 7

Summary of Stepwise Regression of Attendance on IPOE, OCSI-T Subscales, and RSD Concepts (n=73 Schools)

STEP	VARIABLE	R	R^2	R^2	F	p
1.	MSA	.51	.26	---	24.59	.0001
2	GC/V	.57	.32	.06	6.92	.0105
3	MRAT	.62	.39	.07	7.41	.0082

Appendix A

OSCI-T Subscales and Sample Subscale Items

Subscale I: Goal Consensus/Vision (26*)

A common set of school goals is communicated to all who work here.

Administrators in this school encourage teachers to participate in developing school policies.

Subscale II: Manipulative Control (11)

Any available "free time" teachers have is closely monitored by administrators in this school.

The copy machine is closely controlled by administrators in this school.

Subscale III: Work Scrutiny (12)

Procedures used to evaluate teaching make teachers "stay on their toes".

Administrators in this school evaluate my teaching by regular visits to my classroom.

Subscale IV: Autonomy (11)

As a teacher, I can make my own decisions concerning my class(es) without checking with anybody else.

As a teacher, I am allowed to do almost as I please.

Subcale V: Centralization (7)

While teachers' opinions regarding school policies/procedures are recognized, the principal makes the final decisions.

I participate in decisions concerning the adoption of new school policies.

* Number of items per subscale